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EXAMINER	
COUSO, JOSE L	

ART UNIT	PAPER NUMBER
2621	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/626,691	YUSHIYA ET AL.	
	Examiner	Art Unit	
	Jose L. Couso	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 July 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *57-78* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *57-78* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *25 July 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☒ Certified copies of the priority documents have been received in Application No. 08/869,480.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *7/25/03*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 57-78 are rejected under 35 U.S.C. 102(b) as being anticipated by Tamagaki (U.S. Patent No. 4,760,609).

With regard to claim 57, Tamagaki describes an image reading system connectable to a control apparatus through an interface and an image reading apparatus, which describes a plurality of light sources of mutually different light emission wavelengths (see figures 6a-b and 7, element 6, 7 and 8, and refer for example to column 3, lines 40-41); and a photoelectric conversion unit which photoelectrically converts an image of an object illuminated by the plurality of light sources (see figure 7, element 5 and refer for example to column 3, lines 48-57); wherein the control apparatus includes a memory which stores a light source control program corresponding to a first mode and another light source control program

corresponding to a second mode for controlling turn-on of the plurality of light sources in a manner different from that in the first mode, and a turn-on control unit which reads out from the memory one of the light source control programs, and effects control of turn-on of the plurality of light sources in one of the first mode and the second mode, through the interface according to the light source control program read out from the memory (see figure 7, element 17 and refer for example to column 3, lines 48-57, and column 3, line 61 through column 6, line 18 which goes into detail concerning the turning on and off of the light sources, also see figure 7, element 17 and refer for example to column 3, lines 48-57, the CPU has a memory storing such a program).

As to claim 58, Tamagaki describes wherein in the first mode and the second mode, the plurality of light sources are controlled so as to be turned on in a predetermined order (see figure 5 and refer for example to column 3, line 61 through column 18).

In regard to claim 59, Tamagaki describes wherein in the first mode and the second mode, the plurality of light sources are turned on in a predetermined order in such a manner that turn-on time periods of the plurality of light sources do not overlap with each other (see figure 5 and refer for example to column 3, line 61 through column 18).

With regard to claim 60, Tamagaki describes wherein in the first mode, a signal accumulated in said photoelectric conversion unit in response to turn-on of each of said light sources is read out sequentially in a first line period, and in the second mode, a signal accumulated in said photoelectric conversion unit throughout turn-on of said

plurality of light sources is read out in the first line period once every time said plurality of light sources are turned on in a predetermined order (see figure 5 and refer for example to column 3, line 61 through column 18).

As to claim 61, Tamagaki describes a image reading apparatus comprising a plurality of light sources of mutually different light emission wavelengths (see figures 6a-b and 7, element 6, 7 and 8, and refer for example to column 3, lines 40-41); and a photoelectric conversion unit which photoelectrically converts an image of an object illuminated by the plurality of light sources (see figure 7, element 5 and refer for example to column 3, lines 48-57); said control apparatus comprising a memory which stores a light source control program corresponding to a first mode, and another light source control program corresponding to a second mode for controlling turn-on of the plurality of light sources in a manner different from that in the first mode; and a turn-on control unit which reads out from said memory one of the light source control programs, and effects control of turn-on of the plurality of light sources, in one of the first mode and the second mode, through the interface according to the light source control program read out from said memory (see figure 7, element 17 and refer for example to column 3, lines 48-57, and column 3, line 61 through column 6, line 18 which goes into detail concerning the turning on and off of the light sources, also see figure 7, element 17 and refer for example to column 3, lines 48-57, the CPU has a memory storing such a program).

In regard to claim 62, Tamagaki describes wherein in the first mode and the second mode, the plurality of light sources are controlled so as to be turned on in a

predetermined order (see figure 5 and refer for example to column 3, line 61 through column 18).

With regard to claim 63, Tamagaki describes wherein in the first mode and the second mode, the plurality of light sources are turned on in a predetermined order in such a manner that turn-on time periods of the plurality of light sources do not overlap with each other (see figure 5 and refer for example to column 3, line 61 through column 18).

As to claim 64, Tamagaki describes wherein in the first mode, a signal accumulated in the photoelectric conversion unit in response to turn-on of each of the light sources is read out sequentially in a first line period, and in the second mode, a signal accumulated in the photoelectric conversion unit throughout turn-on of the plurality of light sources is read out in the first line period once every time the plurality of light sources are turned on in a predetermined order (see figure 5 and refer for example to column 3, line 61 through column 18).

In regard to claim 65, Tamagaki describes an image reading apparatus comprising a plurality of light sources of mutually different light emission wavelengths (see figures 6a-b and 7, element 6, 7 and 8, and refer for example to column 3, lines 40-41); a photoelectric conversion unit which photoelectrically converts an image of an object illuminated by said plurality of light sources (see figure 7, element 5 and refer for example to column 3, lines 48-57); and an interface connectable to a control apparatus, wherein said plurality of light sources further comprises a receiving unit which receives an instruction from the control apparatus from a program corresponding to one of a first

mode and a second mode, and turn-on means for effecting turn-on control according to the received instruction (see figure 7, element 17 and refer for example to column 3, lines 48-57, and column 3, line 61 through column 6, line 18 which goes into detail concerning the turning on and off of the light sources, also see figure 7, element 17 and refer for example to column 3, lines 48-57, the CPU has a memory storing such a program).

With regard to claim 66, Tamagaki describes wherein in both the first mode and the second mode, said plurality of light sources are controlled so as to be turned on in a predetermined order (see figure 5 and refer for example to column 3, line 61 through column 18).

As to claim 67, Tamagaki describes wherein in both the first mode and the second mode, the plurality of light sources are turned on in a predetermined order in such a manner that turn-on time periods of said plurality of light sources do not overlap with each other (see figure 5 and refer for example to column 3, line 61 through column 18).

With regard to claim 68, Tamagaki describes wherein in the first mode, a signal accumulated in said photoelectric conversion unit in response to turn-on of each of the light sources is read out sequentially in a first line period, and in the second mode, a signal accumulated in said photoelectric conversion unit throughout turn-on of said plurality of light sources is read out in the first line period once every time said plurality of light sources are turn-on on in a predetermined order (see figure 5 and refer for example to column 3, line 61 through column 18).

In regard to claim 69, Tamagaki describes a control method of a control apparatus connectable through an interface to an image reading apparatus comprising a plurality of light sources of mutually different light emission wavelengths (see figures 6a-b and 7, element 6, 7 and 8, and refer for example to column 3, lines 40-41); and photoelectric conversion means for photoelectrically converting an image of an object illuminated by the plurality of light sources (see figure 7, element 5 and refer for example to column 3, lines 48-57); said control method comprising: a read-out step of reading out from a memory included in the control apparatus, a program corresponding to a selected mode in each of case that a first read mode is selected and case that a second read mode for effecting light source turn-on control different from that of the first read mode; and a turn-on control step of effecting control of turn-on of the plurality of light sources corresponding to the selected mode, through the interface according to the program read out from the memory (see figure 7, element 17 and refer for example to column 3, lines 48-57, and column 3, line 61 through column 6, line 18 which goes into detail concerning the turning on and off of the light sources, also see figure 7, element 17 and refer for example to column 3, lines 48-57, the CPU has a memory storing such a program).

With regard to claim 70, Tamagaki describes wherein in the first read mode and the second read mode, the plurality of light sources are controlled so as to be turned on in a predetermined order (see figure 5 and refer for example to column 3, line 61 through column 18).

As to claim 71, Tamagaki describes wherein in both the first read mode and the second read mode, the plurality of light sources are turned on in a predetermined order in such a manner that turn-on time periods of the plurality of light sources do not overlap with each other (see figure 5 and refer for example to column 3, line 61 through column 18).

In regard to claim 72, Tamagaki describes wherein in the first read mode, a signal accumulated in the photoelectric conversion means in response to turn-on of each of the light sources is read out sequentially in a first line period, and in the second read mode, a signal accumulated in the photoelectric conversion means throughout turn-on the plurality of light sources is read out in the first line period once every time the plurality of light sources are turned on in a predetermined order (see figure 5 and refer for example to column 3, line 61 through column 18).

With regard to claim 73, Tamagaki describes a storage medium for computer-readably storing a program for executing a control method defined in Claim 69 in a control apparatus (see figure 7, element 17 and refer for example to column 3, lines 48-57, the CPU has a memory storing such a program).

As to claim 74, Tamagaki describes a control method of an image reading apparatus comprising a plurality of light sources of mutually different light emission wavelengths (see figures 6a-b and 7, element 6, 7 and 8, and refer for example to column 3, lines 40-41); photoelectric conversion means for photoelectrically converting an image of an object illuminated by the plurality of light sources (see figure 7, element 5 and refer for example to column 3, lines 48-57); and an interface connectable to a

control apparatus, wherein the plurality of light sources receives an instruction from the control apparatus, which is based on a program corresponding to one of a first read mode and a second read mode, and effects turn-on control according to the received instruction (see figure 7, element 17 and refer for example to column 3, lines 48-57, and column 3, line 61 through column 6, line 18 which goes into detail concerning the turning on and off of the light sources, also see figure 7, element 17 and refer for example to column 3, lines 48-57, the CPU has a memory storing such a program).

In regard to claim 75, Tamagaki describes wherein in both the first read mode and the second read mode, the plurality of light sources are controlled so as to be turned on in a predetermined order (see figure 5 and refer for example to column 3, line 61 through column 18).

With regard to claim 76, Tamagaki describes wherein in the first read mode and the second read mode, the plurality of light sources are turned on in a predetermined order in such a manner that turn-on time periods of the plurality of light sources do not overlap with each other (see figure 5 and refer for example to column 3, line 61 through column 18).

As to claim 77, Tamagaki describes wherein in the first read mode, a signal accumulated in the photoelectric conversion means in response to turn-on of each of the light sources is read out sequentially in a first line period, and in the second read mode, a signal accumulated in the photoelectric conversion means throughout turn-on of the plurality of light sources is read out in the first line period once every time the

plurality of light sources are turned on in a predetermined order (see figure 5 and refer for example to column 3, line 61 through column 18).

With regard to claim 78, Tamagaki describes a storage medium for computer-readably storing a program for executing a control method defined in Claim 74 in an image reading apparatus (see figure 7, element 17 and refer for example to column 3, lines 48-57, the CPU has a memory storing such a program).

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kobayashi et al. disclose a system similar to applicant's claimed invention.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jose L. Couso whose telephone number is (571) 272-7388. The examiner can normally be reached on Monday through Friday from 6:30 to 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Mancuso, can be reached on (703) 272-7695. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the USPTO contact Center whose telephone number is (703) 308-4357.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jlc
October 18, 2005

JOSE L. COUSO
PRIMARY EXAMINER